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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/709,570 | 05/14/2004 | Tzu-Feng Tseng | PMXP0187USA | 3569 |

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| EXAMINER |
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LANDRUM, EDWARD F

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| ART UNIT | PAPER NUMBER |
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3724

DATE MAILED: 07/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/709,570

Applicant(s)

TSENG, TZU-FENG

Examiner

Edward F. Landrum

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) 2-4, 7, 13 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5, 6, 8-12, 19 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 5/14/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claims 2-4, 7, 13, and 20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 5/5/2006.

Applicant's election without traverse of claims 1, 5, 6, 8-12, 19, and 21 in the reply filed on 5/5/2006 is acknowledged.

Examiner Claim Withdrawals

2. Claim 20 has also been withdrawn (see above) from consideration by the examiner because the claims are not directed to the elected species.

Claim 20 states that the driving means can move in the first direction and opposite with the clamp. Paragraph 30 of the disclosure states that in applicant's elected species the driving means does not move in the first direction and opposite with the clamp. Therefore, the driving means cannot move in the first direction and opposite.

Drawings

3. The drawings are objected to because in Figure 2 "34" points to the spring and "65" points to the protrusion instead of vise versa. In Figure 3, "40" pointing to the connector should be --44--. In Figure 6, the linear actuator should be labeled --80--. In Figure 7, the support should be labeled --160--. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should

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include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1, 5, 6, 8-12, and 19-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is not understood how the cam (64) acts against the protrusion (34) to cause the clamp to move up or down as

described on page 6 of the specification. Both the cam (64) and the protrusion (34) are located on the cam, therefore besides a pivotal connection between the cam (64) and the support (62) the clamp does not seem to be sufficiently attached to the support (62) to produce movement by pulling land (66). Furthermore, the A direction seems to be straight down, if the handle (66) were pulled down, it seems that the clamp would therefore have to rotate because of the pivot connection described above. Slots (68) on the support (62) would prohibit the clamp from rotating. Therefore there seems to be no way for the clamp member to move in order to clamp the sheet material.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 5, 6, 8, 9, 11, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spaulding (U.S Patent No. 3,301,117) in view of Kimura et al (U.S Patent No. 4,965,733), hereinafter Kimura.

Spaulding teaches (see Figures 1-5, and 8) a flat media cutting device comprising: a planar base (15); two supports (20) extending normal to the plane of the base; a clamp (11) that extend parallel and between the two supports (20), the clamps thereby preventing movement of the clamp parallel to the plane of the base but allowing movement perpendicular to the plane of the base; and a slider (30, 31, and 70) is mounted in a slidable manner on the clamp (11, see Figure 4) and contains a cutting

tool (45). Furthermore, Spaulding teaches that the cutting tool (45) moves up and down with the clamping member (see Figure 4).

Spaulding teaches all of the elements of the current invention as stated above except the use of a linear actuator, driven by a transmission and a motor, to drive the cutting tool across the clamped surface. More specifically the linear actuator is a belt, and the slider is connected to the belt by a pinned connection. The transmission is a friction drive comprising a belt. Furthermore a switch is used to control the power of the motor.

Kimura teaches (see Figure 2) that it is old and well known in the cutting art to use a linear actuator made of a belt (22) to drive a cutting member (48) across a flat material to be cut. Furthermore, Kimura teaches the use of a motor 25, and a friction belt transmission (28) to power the linear actuator (22). Furthermore, Kimura teaches cutting member (48) capable of being moved in a direction perpendicular to the cutting direction (Col. 2, lines 29-38).

Although Kimura does not explicitly teach the motor comprising a switch to control the power to the cutting device the examiner takes official notice that the use of a switch in relation to providing power to a motor is inherent in the design of the motor, since a switch can be defined as the ability to pull an electrical cord in and out of a socket.

It would have been obvious to have modified Spaulding to incorporate the teachings of Kimura to provide a motorized means to move the cutting member along the clamping member and further allow the slider to move with the clamp in a direction perpendicular to the cutting direction. Providing a belt driven and actuation device

allows a user to stand away from the cutting device during the cutting process thereby preventing a user from cutting him or herself by accidentally sliding the cutting blade over his or her fingers. Providing means to allow the cutting member to stay follow the perpendicular movements of the clamping member would create a more precise cut and eliminate the need for a user to check the height of the blade when the clamp is moved to thereby make sure the blade can cut the material and so the material can be removed once cutting is complete and the clamp is lifted.

It would have been an obvious design choice to modify the modified device of Spaulding by having the slider connect to the belt via a pinned connection, since the applicant has not disclosed that having a specific connection between the sliding device and the belt solves any stated problem or is for any particular purpose and it appears the cutting device would perform equally well with the sliding device connected by any means that allows the sliding device to move in the perpendicular direction.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified device of Spaulding in view of Samuelsson (U.S Patent No. 4,604,802).

The modified device of Spaulding teaches all of the elements of the current invention as stated above except the use of a clamp actuator with a handle to move the clamp in the first direction and opposite.

Samuelsson teaches (see Figures 1-3) the use of a clamp actuator (61) with a handle (69) for clamping beams (11 and 13) together.

It would have been obvious to have modified the modified device of Spaulding to incorporate the teachings of Samuelsson to provide a clamping actuator and handle to

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the clamping mechanism. Adding a clamping actuator would allow the user to clamp the material in the clamping direction then step away from the apparatus to perform the cutting operation so the user did not have to hold the clamp down during the entire operation.

9. Claims 12 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified device of Spaulding in view of Hall (U.S Patent No. 4,864,906).

The modified device of Spaulding teaches all of the elements of the current invention as stated above except the cutting device comprising two detect switches for the purpose of reversing the motor when touched by the slider.

Hall teaches (see Figure 1) the use of two switches (126 and 130) located at each extreme of the horizontal cutting distance of the cutting device. The purpose of each button being to reverse the motor to thereby make the sliding mechanism (28) go the opposite way on the linear actuator (90, Col. 4, lines 45-62).

It would have been obvious to have modified the modified device of Spaulding to incorporate the teachings of Hall to provide two switches capable of being hit by the slider for the purpose of reversing the direction of the slider by reversing the motor. Allowing the slider to reverse automatically would allow the same cut to be cut again thereby making sure that all material to be cut has been cut through entirely.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Heller (U.S Patent No. 6,202,527), Stork (U.S Patent No. 4,785,698), Austin (U.S Patent No. 1,434,475), Martin (U.S Patent No. 3,897,706), and Lundgren (U.S Patent No. 4,833,957) all teach flat material cutting mechanisms pertinent to the instant application.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward F. Landrum whose telephone number is 571-272-5567. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EFL
6/20/2006


BOYER D. ASHLEY
SUPERVISORY PATENT EXAMINER